



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/638,218	08/07/2003	Abhishek Singh	062020-1390	3327
24504	7590	06/30/2005	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP			NGUYEN, NAM V	
100 GALLERIA PARKWAY, NW				
STE 1750			ART UNIT	PAPER NUMBER
ATLANTA, GA 30339-5948			2635	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/638,218

Applicant(s)

SINGH, ABHISHEK

Examiner

Nam V. Nguyen

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/4/03; 3/1/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The application of Singh for a “secure authentication of a user to a system and secure operation thereafter” filed August 07, 2003 has been examined.

Claims 1-20 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, the phrase “if the user is not authenticated to the proximity device after a predetermined number of attempts, garbling sensitive information stored in the proximity device” is confusing and unclear. It is not understood what is meant by such a limitation. Is the proximity device authenticating the user or is the system authenticating the user via a proximity device? Is the sensitive information garbled when the proximity device is not in proximity to the system?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1 and 3-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kataoka (US# 6,515,575).

Referring to claim 1, Kataoka discloses a method of authenticating user and system for authenticating user as recited in claim 1. See Figures 2-5 and respective portions of the apparatus and method.

Kataoka discloses a method for providing secure authentication of a user to a system (20) (i.e. a portable data communication terminal) and secure operation of the system (20) thereafter (column 1 line 57 to column 2 line 53; see Figures 2-5), the method comprising:

Art Unit: 2635

authenticating a user (i.e. a user with an user-authenticating device) to the system (20) directly (40) (i.e. login data at the input section) (column 1 lines 22 to 49; see Figure 1) or via a proximity device (10) (i.e. an user-authenticating device) (column 4 lines 46 to 62; see Figure 2);

authenticating the proximity device (10) to a receiver (240) (i.e. a radio receiver) in the system (20) (column 4 line 46 to column 5 line 35; see Figures 2 and 3);

upon successful authentication (i.e. coincident with the response data), initiating operation (i.e. to log in and to start communication) of the system (20) (column 5 line 60 to column 6 line 24; see Figure 3); and

intermittently communicating (i.e. restart verification again within a predetermined time) between the proximity device (10) and the receiver (240) to verify whether the proximity device (10) is within continued proximity (i.e. within distance) of the system (20) (column 8 lines 10 to 28; see Figures 3-4).

3. The method of claim 1, further comprising: communicating a distress signal (i.e. transmit a request of interruption), if it is determined that the proximity device (10) is not operating in proximity of the system (20) (column 8 lines 27 to 37; see Figures 4 and 5).

4. The method of claim 1, further comprising: beginning operation of the system in a fail-safe mode (i.e. log-out from host system) if it is determined that the proximity device (10) is not operating in proximity of the system (20) (column 8 lines 27 to 65; see Figures 4 and 5).

Art Unit: 2635

5. The method of claim 1, wherein the proximity device (10) is a smart card (column 4 line 63 to 65; see Figure 2).

6. The method of claim 1, wherein authenticating the user to the system (20) comprises at least one or a combination of the following: receiving user identification (ID) information (i.e. user code in memory 140) (column 4 line 63 to column 5 line 17; see Figure 2).

7. The method of claim 1, wherein authenticating the proximity device (10) to the receiver (240) (i.e. a receiver of a portable data communication terminal 20) comprises at least one or a combination of the following: a challenge-response algorithm (column 5 lines 8 to column 6 line 23; column 7 lines 16 to 44; see Figures 2 and 3).

8. The method of claim 1, wherein authenticating the proximity device (10) to the receiver (240) comprises one of: communicating via a wireless interface (i.e. by radio frequency) or via a wired interface (i.e. direct login using input section 320) (column 1 lines 23 to 42; column 4 lines 46 to column 5 line 49; see Figures 1 and 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kataoka (US# 6,515,575) as applied to claim 1 above, and in view of Muratov (US 2003/0097596).

Referring to claim 2, Kataoka discloses a method of claim 1, however, Kataoka did not explicitly disclose further including if the user is not authenticated to the proximity device after a predetermined number of attempts, garbling sensitive information stored in the proximity device.

In the same field of endeavor of a system for protecting data within a portable electronic device, Muratov et al. teach that if the user is not authenticated to the proximity device (20) (i.e. a PDA) after a predetermined number of attempts (i.e. exceeding entry limit), garbling (i.e. erased) sensitive information stored in the proximity device (20) (page 6 paragraph 0103 to 0104; page 6 paragraph 0106; see Figure 9) in order to protect the database within a portable electronic device.

One of ordinary skilled in the art recognizes the need to erase all databases and applications residing in memory of the PDA if attempted unauthorized access is detected of Muratov et al. in a system of authenticating a user Kataoka because Kataoka suggests it is desired to provide that an access controller controls log-in and log-out operations response to a login request input through the input section (column 5 lines 25 to 30; see Figure 2) and Muratov et al. teach that if attempted exceeded entry limit, all databases and applications residing in RAM are erased (page 6 paragraph 0106; see Figure 9) in order to protect the data within a portable device. Therefore, it would have been obvious to a person of ordinary skill in

Art Unit: 2635

the art at the time of the invention was made to erase all databases and applications residing in memory of the PDA if attempted unauthorized access is detected of Muratov et al. in a system of authenticating a user Kataoka with the motivation for doing so would have been to provide more secure and to protect information in a portable electronic device.

Referring to claims 9 and 16, Kataoka discloses a system and a device for user authentication to a machine and secure operation of the machine thereafter, to the extent as claimed with respect to claim 1 above, and Muratov et al. disclose the system or device (20) further including: means (i.e. in step 160) for authenticating a user to the proximity device (20) (page 6 paragraph 0104; see Figure 9).

Referring to claims 10-14 and 17-20, Kataoka in view of Muratov et al. disclose a system and a device of Claims 9 and 16, the claims 10-14 and 17-20 same in that the claims 2-7 already addressed above therefore claims 10-14 and 17-20 are also rejected for the same obvious reasons given with respect to claims 2-7.

Referring to claim 15, Kataoka in view of Muratov et al. disclose a system of Claim 9, Kataoka disclose wherein the proximity device (10) further comprises: means (140) (i.e. user code memory) for storing identification information (i.e. user code) about at least a first user (column 4 line 63 to column 5 line 17; see Figure 2).

Referring to claim 20, Kataoka in view of Muratov et al. disclose a system of Claim 16, Muratov et al. disclose further including logic configured to operate the device (20) (i.e. a PDA)

Art Unit: 2635

in a sleep mode (i.e. power off in a grace period), such that minimal power needed to maintain intermittent communications with the receiver is utilized (page 6 paragraph 0103; see Figure 9).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Borza (US# 5,867,802) discloses a biometrically secured control system for preventing the unauthorized use of a vehicle.

Hsu et al. (US# 6,100,811) disclose a fingerprint actuation of customized vehicle features.

Graves (US# 6,454,173) disclose a smart card technology).

Tatsukawa et al. (US# 6,710,700) disclose a vehicle key system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

Art Unit: 2635

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nam Nguyen
June 24, 2005



MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

